

## ABSTRACT OF DISCLOSURE

A phonetic data processing system processes phonetic stream data to produce a set of semantic data, using a context-free rich semantic grammar database (RSG DB) that includes a grammar tree, comprised of sub-trees, representing words and phrases. A phonetic searcher  
5 accepts the phonetic estimates and searches the RSG DB to produce a best word list, which is processed by a semantic parser, using the RSG DB, to produce a semantic tree instance, including all valid interpretations of the phonetic stream. An application accesses a semantic tree evaluator to interpret the semantic tree instance according to a context to produce a final linguistic interpretation of the phonetic stream, which is returned to the application.